



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

June 19, 2020

LR-16J

### **VIA ELECTRONIC MAIL**

Mr. Cary Mathias  
Regional Waste Manager  
ArcelorMittal USA  
4020 Kinross Lakes Parkway  
Richfield, OH 44286-9000

**RE: Conceptual Site Model (CSM) and Human Health Risk Assessment (HHRA)  
ArcelorMittal Indiana Harbor Long Carbon Property  
EPA ID No. IND 005 159 199**

Dear Mr. Mathias

The U.S. Environmental Protection Agency has reviewed the April 22<sup>nd</sup> *Response to U.S. EPA Comments CSM HHRA Report* (Report) submitted to EPA by ArcelorMittal, USA for the Indiana Harbor Long Carbon Parcel (IHLC). The Report was submitted in response to comments submitted by EPA dated March 6, 2020 and is intended to provide an assessment of current conditions as they pertain to the possible sale or redevelopment of the IHLC. ArcelorMittal represents that the reasonably anticipated future use of the IHLC will continue to be industrial, however may not remain in use for steel making purposes. EPA's review focused on technical consistency and adherence to policy and regulations

### **Key Findings**

The HHRA and CSM concludes that the risks to reasonably anticipated future users of the site are limited to surface soils for industrial workers and soils up to 10 feet below ground surface (bgs) for construction workers. These risks appear to be primarily driven by manganese, which is ubiquitous in site soils due to the historic nature of fill material and other activities. The HHRA and CSM were developed under the expectation that the site remains industrial, and as indicated in EPA's comments, the conclusions are largely predicated on the assumption that current controls remain in place should the IHLC change ownership.

In addition to soils, groundwater has also been identified as a potentially complete exposure pathway due to elevated arsenic and benzene concentrations above relevant screening criteria. It is understood that existing controls provide an effective barrier to exposure, as groundwater is not currently used for any purposes associated with human health risks and institutional controls prevent users from engaging in activities that would change groundwater use. Similar to conclusions associated with soils, exposure pathways only remain incomplete provided existing controls remain in place indefinitely or until

groundwater contamination is no longer present above screening criteria associated with all exposure scenarios.

The indoor air exposure pathway was not evaluated in detail despite the main building at the IHLC lying in close proximity to groundwater wells impacted by benzene. It was determined, both by visual inspection and a general assessment of building characteristics compared typical assumptions used in typical vapor intrusion risk assessments, that enough lines of evidence exist to not require a direct vapor intrusion investigation. An indirect and quantitative assessment was provided in the Report using these building characteristics and assumptions, suggesting that a conservative estimate of indoor air concentrations would be sufficiently low to discount this exposure pathway.

### **EPA Determination**

Based on the information provided in the Report, EPA believes the HHRA and CSM are an accurate representation of current conditions at the IHLC, which include risks associated with existing soil and groundwater contamination. As indicated in the Report and sampling data, groundwater impacts are still present above federal and state cleanup criteria at significant concentrations at some sampling locations, however, given the absence of acute risks and the controls in place, are not of immediate concern to EPA. The IHLC parcel is reasonably understood to be a lower priority area when the greater ArcelorMittal Indiana Harbor East facility is considered, which is subject to corrective action.

ArcelorMittal is currently engaged in remedial activities at other areas across the roughly 2,400-acre facility, many of which are a higher priority either due to risks associated with soil and groundwater impacts or other strategies to achieve site closure. Given the conclusions referenced above, EPA does not anticipate requiring additional work at this parcel beyond routine groundwater monitoring at this time. This monitoring is intended to evaluate and confirm any changes in groundwater concentrations at the parcel while contamination remains in place and ArcelorMittal addresses higher priority issues at other areas of the facility.

As noted elsewhere in this letter and in earlier correspondence, any significant changes in site use from the assumptions used in the evaluations in the Report may render the Report no longer representative, requiring an updated HHRA and CSM. Similarly, if routine groundwater monitoring data suggests impacts are unexpectedly worsening, EPA may require ArcelorMittal to update the HHRA, CSM and recommend other actions be taken. It is expected that a deed restriction will be recorded on the IHLC prior to any transaction to ensure the drinking water pathway remains incomplete.

If you have any questions about this letter, please contact me at (312) 353-9229 or [pursel.brandon@epa.gov](mailto:pursel.brandon@epa.gov).

Sincerely,

Brandon Pursel  
Project Manager, Corrective Action Section 3  
Land, Chemicals & Redevelopment Division

cc: John Hill (ArcelorMittal)